



Department Description

The City of San Diego has one of the largest and most complex water storage, treatment, and delivery systems in the world. Since the San Diego region is considered semi-arid and lacks water as a natural resource, 85-90 percent of the water used by residents is imported. One of the Water Department's primary responsibilities is to secure imported water supplies for the residents of San Diego while continuing to both manage demand through improved water conservation and to research alternative water supplies such as recycled water, groundwater, desalinated sea water, etc. In addition to supplying water, the Department also performs a variety of functions and provides a number of services including water system repair and maintenance.

The Department's mission is:

To provide safe, reliable water in an efficient, cost-effective, and environmentally-responsible manner

Goals and Objectives

The following goals and objectives represent the action plan for the Department.

Goal 1: Safe, reliable water

The Water Department is dedicated to its public health responsibilities of providing safe and reliable water. The Department strives to exceed all federal and State water quality standards, maintain and build needed infrastructure, and deliver water to customers efficiently and reliably. The Department will move toward accomplishing this goal by focusing on the following objectives.

- Maintain and improve infrastructure
- Exceed environmental and public health standards
- Ensure efficient treatment and delivery of water

Goal 2: Fiscally-sound, operationally efficient Water Department

The Water Department utilizes strategic financial planning to ensure financial viability to operate and maintain the water system. The Department provides a fiscally sound, efficient organization that is responsive and dependable. By doing so, the Water Department enhances its long-term viability, accountability, ethics, and transparency as cornerstones with which to build trust with customers. The Department will move toward accomplishing this goal by focusing on the following objectives.

- Build public trust through timely response and resolution to inquiries

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- Provide cost-effective, customer-focused service
- Utilize integrated information systems to support decision-making
- Control expenditures to minimize rate impacts

Goal 3: Sustainable growth and economic prosperity

The Water Department recognizes that water supplies are critical to preserving the quality of life, economic prosperity, and growth of the City. The Water Department identifies, evaluates, and plans short and long-term water demand and supply reliability options. The Department will move toward accomplishing this goal by focusing on the following objectives.

- Engage in regional initiatives with other water agencies which provide viable, environmentally-responsible and cost-effective alternative sources of water supply
- Provide high quality water demand and supply assessments in conjunction with local and regional development planning
- Complete comparative analysis of alternative water supply options available to the City as a retail agency

Goal 4: Responsive, safe, and innovative workforce

The Water Department is proud of its professional, technically-proficient, and diverse workforce. The Department is dedicated to ensuring its employees have the training and equipment necessary to provide safe, reliable water in a customer-friendly manner. The Department will continue to meet its goal of being a service-oriented and innovative utility through strategic workforce planning and by providing employees the knowledge, skills, and abilities necessary to perform their jobs safely. The Department will move toward accomplishing this goal by focusing on the following objectives.

- Ensure employees have the necessary training, knowledge, skills, and abilities
- Ensure employees have the necessary equipment to do their jobs
- Ensure that we have a safety-conscious workforce
- Recognize and when possible reward high performing employees
- Ensure adequate staffing to meet the operational needs of the Department

Service Efforts and Accomplishments

Water Operations Bid-to-Goal Program

The Water Operations Bid-to-Goal Program is currently in its fourth year of a five-year Bid-to-Goal contract. The result of the audited bid savings in Fiscal Year 2006 was \$9,859,982. The Fiscal Year 2007 estimated bid savings is \$11,429,504.

The Water Department was the first public water agency in the nation to combine a Bid-to-Goal management tool with the International Organization for Standardization (ISO) 14001 certification. In Fiscal Year 2007, the Water Operations Division maintained ISO 14001 certification as verified by an external surveillance audit.

The Water Quality Laboratory is now one of only a few labs in the country to identify the Quagga mussel (*Dreissena rostriformis bugensis*) at the larval stage. This mussel is a threat to the raw water distribution systems and the ability for early detection will not only provide excellent timeliness in identifications, but also prevent the cost of \$200 - \$300 per sample when testing is sent to outside labs.

In partnership with Sun Edison, the Department has created two large-scale solar energy projects at the Alvarado Water Treatment Plant. The energy generated from the system is sold to the City at a reduced cost. One of the projects provides over 60% of the energy needed to operate the Lake Murray Pump Station and the other provides over 80% of the energy needs of the Water Quality Laboratory. These projects have received three awards: an Outstanding Environmental Solution Award from the Association of Environmental Professionals; a San Diego Earthworks E.A.R.T.H. Award for 2007; and a Significant Achievement Solutions Award from the Public Technology Institute. Additional solar facilities are planned for Fiscal Year 2008 at the Rancho Bernardo Reservoir to serve the Rancho Bernardo Industrial Pump Station and for Fiscal Year 2009 at the Otay Treatment Plant.

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The Customer Support Division in the Water Department responded to more than 455,000 phone calls and emails in the past year. These included inquiries regarding customer accounts, information about water conservation, and general questions to the Public Information Section. Also, through the efforts of the Water conservation staff, San Diego uses approximately the same amount of water it did 16 years ago, even with a 21 percent increase in population.

The Water Department recently celebrated the completion of an \$83 million upgrade and expansion of the Miramar Water Treatment Plant. This is the second of four projects which will ultimately increase the capacity and reliability at the treatment plant and allow the Water Department to meet or exceed new stricter federal and State drinking water standards.

Over 400 retail customers and three wholesale customers are now connected to the City's recycled water distribution systems. The beneficial reuse of recycled water exceeded 8,040 acre-feet (AF) in Fiscal Year 2007 (6,137.6 AF from the North City Water Reclamation Plant and 1,902.7 AF from South Bay). The Water Department qualified for over \$2.1 million in financial incentives from water wholesalers for recycled water sales.

The City Council approved the San Pasqual Groundwater Management Plan in November 2007. This plan will allow the City to qualify for State and federal funds to assist in the management of the groundwater basin and implementation of projects. The Water Resources section of the Water Department completed the Mount Hope and installed the Balboa Park groundwater monitoring wells. These wells will provide valuable information on the condition of the groundwater basin and water quality to be used for water resources planning.

The Water Department's Grant section is working to complete final State Proposition 50 grant agreements for the upgrade and expansion of three water treatment plants and department security projects. The projects would improve the water treatment process at each of the plants and provide additional security measures at City water facilities. There is an estimated \$58 million in potential grant awards the Department is working to secure in Fiscal Year 2008.

The Information Technology section of the Water Department completed three exciting projects. The Water Executive Team Data Warehouse Dashboards will provide the Executive Team with daily real-time information related to their area of responsibility in order to help them manage the Water Department more efficiently. A Water Fluoridation web page was also created and implemented to provide information for City of San Diego residents regarding fluoridation concentration levels in the water. Lastly, a new Electronic Bill Presentment and Payment (EBPP) system was developed for residents to pay water and sewer bills online.

The Training section of the Water Department received its five year International Association for Continuing Education and Training (IACET) Certification Renewal without any deficiencies. They also successfully completed the Weapons of Mass Destruction Training for all Water Department employees and successfully completed the seven year transition from a non-certified workforce to a California Department of Public Health-certified Distribution Operator workforce.

The Rate Analysis & Capital Improvement Program Monitoring section implemented a pass-thru rate increase effective January 1, 2008, as a result of increased cost of water purchased from the County Water Authority (CWA). The section has also worked closely with the Debt Management Department to issue short-term notes to borrow \$150 million to continue approved capital improvements programs.

Budget Dollars at Work: Performance Expectations

Goal 1: Safe, reliable water

Performance Measure	Baseline FY2007	Actual FY2008	Target FY2009
1. Number of Primary Maximum Contaminant Level (MCL) violations as a result of potable water quality sampling	0	0	0

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Performance Measure	Baseline FY2007	Actual FY2008	Target FY2009
2. Percent of service leaks investigated within two (2) working days	85.6%	86.2%	87%
3. Percent of service leaks repaired within seven (7) working days after referral	95.6%	97.4%	94% ¹
4. Percent of water main breaks and hydrant knock-overs responded to within one (1) hour	88.4%	80.8%	100%
5. Percent of City-side valve leaks repaired within five (5) working days after referral	95.5%	90.7%	93% ¹

Goal 2: Fiscally-sound, operationally-efficient Water Department

Performance Measure	Baseline FY2007	Actual FY2008	Target FY2009
1. Average number of days to respond to and resolve customer-initiated service investigations	13 days	10 days	13 days
2. Percent increase/decrease in the usage of Electronic Bill Presentment and Payment (EBPP)	13,400/month ²	4.9% increase	10.0% increase
3. Deviation between Operating and Maintenance (O&M) expenditures and those anticipated through the Rate Case	\$350,261,936 ³	\$14,839,619	0% or negative

Goal 3: Sustainable growth and economic prosperity

Performance Measure	Baseline FY2007	Actual FY2008	Target FY2009
1. Volume of raw water purchases reduced as a result of water conservation (in acre-feet per year)	9,504 AFY	10,314 AFY	10,000 AFY
2. Percent increase/decrease in the City-wide use of recycled water (in acre-feet per year)	6,760 AFY ⁴	7,328 AFY	6,960 AFY (3% increase)

Goal 4: Responsive, safe and innovative workforce

Performance Measure	Baseline FY2007	Actual FY2008	Target FY2009
1. Percent of equipment and facilities inventories completed	90%	N/A ⁵	100%

¹ Resources allocated to increase service levels of other performance measures and provide increased support to the Capital Improvement Program.

² This number represents the number of customers estimated to be using EBPP in Fiscal Year 2008. The goal is to increase this by 10% for Fiscal Year 2009.

³ This amount reflects Operating & Maintenance (O&M) expenditures planned for Fiscal Year 2009 developed through the Rate Case. An increase in expenditures is not expected for Fiscal Year 2009.

⁴ Fiscal Year 2007 actual recycled water used within the City of San Diego only. Recycled water deliveries to the City of Poway, Olivenhain Municipal Water District, and Otay Water District have been excluded. Fiscal Year 2009 Target is 3% of Fiscal Year 2007.

⁵ The City Auditor conducts inventory of all equipment and facilities and Water Department collects data. Last inventory conducted was in Fiscal Year 2003 and at this time, future inventory schedule has not been determined.

Budget Dollars at Work: Sizing and Workload Data

	Actual FY2005	Actual FY2006	Actual FY2007	Actual FY2008	Target FY2009
Sizing Data					
Population of City of San Diego	1,305,736	1,311,162	1,316,837	1,336,865	1,343,305
Square miles of land and water (City of San Diego)	404	404	404	404	404
Number of treatment plants	3	3	3	3	3
Number of pump stations	49	49	50	50	50
Number of reservoirs	9	9	9	9	9
Average daily City water consumption (million gallons)	198.50	204.74	221.80	204.00	192.20 ⁶
Total City water consumed including South Bay (million gallons)	72,453.38	74,729.67	73,963	74,430	63,858 ⁶
Total water deliveries (million gallons) ⁷	75,979.03	79,485.75	80,938.30	80,100.00	70,174.00 ⁷
Workload Data					
Miles of operated and maintained pipelines	3,318.98	3,335.50	3,381.20	3,263.00	3,338.00
Number of water meters operated	271,204	272,466	273,304	278,692	275,600
Number of fire hydrants operated and maintained	24,600	24,661	24,905	25,003	24,864
Customer service calls answered (beginning in FY2007, data include e-mail inquiries)	282,184	282,184	455,329	529,255	580,770
Millions of gallons of water (raw and filtered) delivered ⁸	70,983.71	79,485.75	74,842.00	71,451.20	64,300.00 ⁸
Managed acres of Water Department-owned rural lands for watershed and habitat values	N/A	N/A	40,100	41,100	40,100
Acres of burned watershed lands assessed and being remediated in cooperation with other agencies	N/A	N/A	16,681	209,200	Unknown ⁹
Number of preventive maintenance activities (PMs) to air valves, hydrants, blow-offs and valves (≥6") conducted ¹⁰	N/A	N/A	N/A	16,826	16,150
Number of preventive maintenance activities (PMs) on control and regulator valves completed	300	300	467	367	477

⁶ Projection for the Fiscal Year 2009 water volumetric and sales data reflects an anticipated 15% reduction due to conservation efforts.

⁷ Total Water Deliveries represents total water produced by the treatment plants and water delivered by the treated water connections of County Water Authority's (CWA) aqueduct. All of this water is delivered to the City's distribution system

⁸ Raw and filtered water delivered includes all water purchased from CWA. All delivered water combined with local water is used to produce total water deliveries.

⁹ This assessment only occurs following large wildfires which are not predictable. Thus, it is not possible to set numerical targets for future years.

¹⁰ Number of preventative maintenance activities (PM's) to air valves, hydrant, blow-offs, and in-line valves completed does not show activity in Fiscal Year 2005 through Fiscal Year 2007 as that information was not tracked until Fiscal Year 2008.